



#3

OIPE

RAW SEQUENCE LISTING DATE: 04/09/2002 PATENT APPLICATION: US/10/014,326 TIME: 11:22:46

Input Set : N:\Crf3\RULE60\10014326.raw
Output Set: N:\CRF3\04092002\J014326.raw

```
1 <110> APPLICANT: JAKOBSEN, Bent Karsten
      2
              BELL, John Irving
      3
              GAO, George Fu
              WILLCOX, Benjamin Ernest
              BOULTER, Jonathan Michael
      6 <120> TITLE OF INVENTION: Soluble T Cell Receptor
      7 <130> FILE REFERENCE: 102286.409
      8 <140> CURRENT APPLICATION NUMBER: 10/014,326
      9 <141> CURRENT FILING DATE: 2001-11-13
     10 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/335,087
W--> 11 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1999-06-17
     12 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: GB/9810759.2
W--> 13 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-05-19
                                                                 ENTERED
     14 <160> NUMBER OF SEQ ID NOS: 85
     15 <170> SOFTWARE: PatentIn Ver. 2.1
     17 <210> SEQ ID NO: 1
     18 <211> LENGTH: 33
     19 <212> TYPE: DNA
     20 <213> ORGANISM: Artificial Sequence
     21 <220> FEATURE:
     22 <223> OTHER INFORMATION: Description of Artificial Sequence: Forward poly-C
              "anchor" primer for PCR-amplification of cDNAs
     24
              extended at their 3'-terminal with a stretch of
     25
              G-residues using Terminal transferase. (Figure 4A)
     26 <400> SEQUENCE: 1
                                                                                33
              taaatactcg aggcgcgccc ccccccccc ccc
     29 <210> SEQ ID NO: 2
     30 <211> LENGTH: 48
     31 <212> TYPE: DNA
     32 <213> ORGANISM: Artificial Sequence
     33 <220> FEATURE:
     34 <223> OTHER INFORMATION: Description of Artificial Sequence: Human TCR alpha
     35
              chain constant region 3'-specific primer. (Figure
     36
              4B).
     37 <400> SEQUENCE: 2
                                                                                48
              atataacccg gggaaccaga tccccacagg aactttctgg gctgggga
     40 <210> SEQ ID NO: 3
     41 <211> LENGTH: 47
     42 <212> TYPE: DNA
    43 <213> ORGANISM: Artificial Sequence
     44 <220> FEATURE:
    45 <223> OTHER INFORMATION: Description of Artificial Sequence: Human TCR beta
              chain constant region 3'-specific PCR primer.
    46
```

Input Set : N:\Crf3\RULE60\10014326.raw
Output Set: N:\CRF3\04092002\J014326.raw

47 <400> SEQUENCE: 3 48 atataacccg gggaaccaga tccccacagt ctgctctacc ccaggcc 47 50 <210> SEQ ID NO: 4 51 <211> LENGTH: 33 52 <212> TYPE: DNA 53 <213> ORGANISM: Artificial Sequence 54 <220> FEATURE: 55 <223> OTHER INFORMATION: Description of Artificial Sequence: Human c-jun leucine zipper 5'-specific PCR primer. 57 <400> SEQUENCE: 4 catacacccg ggggtagaat cgcccggctg gag 33 60 <210> SEQ ID NO: 5 61 <211> LENGTH: 50 62 <212> TYPE: DNA 63 <213> ORGANISM: Artificial Sequence 64 <220> FEATURE: 65 <223> OTHER INFORMATION: Description of Artificial Sequence: Human c-jun 66 leucine zipper 3'-specific PCR primer. (Figure 67 68 <400> SEQUENCE: 5 gtgtgtgctc gaggatccta gtagttcatg actttctgtt taagctgtgc 50 71 <210> SEQ ID NO: 6 72 <211> LENGTH: 39 73 <212> TYPE: DNA 74 <213> ORGANISM: Artificial Sequence 75 <220> FEATURE: 76 <223> OTHER INFORMATION: Description of Artificial Sequence: Human c-fos 77 leucine zipper 5'-specific PCR primer. (Figure 78 5C). 79 <400> SEQUENCE: 6 catacacccg ggggtctgac tgatacactc caagcggag 39 82 <210> SEQ ID NO: 7 83 <211> LENGTH: 49 84 <212> TYPE: DNA 85 <213> ORGANISM: Artificial Sequence 86 <220> FEATURE: 87 <223> OTHER INFORMATION: Description of Artificial Sequence: Human c-fos leucine zipper 3'-specific PCR primer. (Figure 88 89 5D). 90 <400> SEQUENCE: 7 tgtgtgctcg aggatcctag taagctgcca ggatgaactc tagtttttc 49 93 <210> SEQ ID NO: 8 94 <211> LENGTH: 120 95 <212> TYPE: DNA 96 <213> ORGANISM: Homo sapiens 97 <220> FEATURE: 98 <223> OTHER INFORMATION: Partial human c-fos sequence coding for the 99 leucine zipper domain as fused to TCR beta chains. 100 (Figure 6B).

Input Set : N:\Crf3\RULE60\10014326.raw
Output Set: N:\CRF3\04092002\J014326.raw

```
101 <400> SEQUENCE: 8
          ctgactgata cactccaagc ggagacagac caactagaag atgagaagtc tgctttgcag 60
102
          accgagattg ccaacctgct gaaggagaag gaaaaactag agttcatcct ggcagcttac 120
105 <210> SEQ ID NO: 9
106 <211> LENGTH: 120
107 <212> TYPE: DNA
108 <213> ORGANISM: Homo sapiens
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Partial human c-jun sequence coding for the
          leucine zipper domain as fused to TCR alpha
112
          chains. (Figure 6A).
113 <400> SEQUENCE: 9
          agaatcgccc ggctggagga aaaagtgaaa accttgaaag ctcagaactc ggagctggcg 60
114
          tccacggcca acatgctcag ggaacaggtg gcacagctta aacagaaagt catgaactac 120
115
117 <210> SEQ ID NO: 10
118 <211> LENGTH: 40
119 <212> TYPE: PRT
120 <213> ORGANISM: Homo sapiens
121 <220> FEATURE:
122 <223> OTHER INFORMATION: C-jun leucine zipper amino acid sequence as fused
          to TCR alfa chains. (Figure 6A)
124 <400> SEQUENCE: 10
          Arg Ile Ala Arg Leu Glu Glu Lys Val Lys Thr Leu Lys Ala Gln Asn
125
126
                                                10
127
          Ser Glu Leu Ala Ser Thr Ala Asn Met Leu Arg Glu Gln Val Ala Gln
128
                       20
                                            25
129
          Leu Lys Gln Lys Val Met Asn Tyr
130
132 <210> SEQ ID NO: 11
133 <211> LENGTH: 40
134 <212> TYPE: PRT
135 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: C-fos leucine zipper amino acid sequence as fused
          to TCR beta chains. (Figure 6B).
139 <400> SEQUENCE: 11
140
         Leu Thr Asp Thr Leu Gln Ala Glu Thr Asp Gln Leu Glu Asp Glu Lys
141
                                                10
142
          Ser Ala Leu Gln Thr Glu Ile Ala Asn Leu Leu Lys Glu Lys Glu Lys
143
                                                                30
                       .20
                                            25
144
          Leu Glu Phe Ile Leu Ala Ala Tyr
147 <210> SEO ID NO: 12
148 <211> LENGTH: 26
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Description of Artificial Sequence: Forward PCR
          primer for mutating the unpaired cysteine of human
```

Input Set : N:\Crf3\RULE60\10014326.raw
Output Set: N:\CRF3\04092002\J014326.raw

```
154
          TCR beta chains to serine (Figure 7A).
155 <400> SEQUENCE: 12
                                                                              26
          gactccagat acagcctgag cagccg
158 <210> SEQ ID NO: 13
159 <211> LENGTH: 8
160 <212> TYPE: PRT
161 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Amino acid sequence of the human TCR beta chain
          after mutating the unpaired cysteine to serine
165
          (Figure 7A).
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Description of Artificial Sequence: Amino acid
          sequence of the human TCR beta chain after
168
169
          mutating the unpaired cysteine to serine (Figure
170
          7A).
171 <400> SEQUENCE: 13
172
          Asp Ser Arg Tyr Ser Leu Ser Ser
173
175 <210> SEQ ID NO: 14
176 <211> LENGTH: 26
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Description of Artificial Sequence: Backward PCR
          primer for mutating the unpaired cysteine of human
181
182
          TCR beta chains to serine (Figure 7B).
183 <400> SEQUENCE: 14
184
          cggctgctca ggctgtatct ggagtc
                                                                              26
186 <210> SEQ ID NO: 15
187 <211> LENGTH: 26
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Forward PCR
          primer for mutating the unpaired cysteine of human
          TCR beta chains to alanine (Figure 7C).
193
194 <400> SEQUENCE: 15
          gactccagat acgctctgag cagccg
                                                                              26
197 <210> SEQ ID NO: 16
198 <211> LENGTH: 8
199 <212> TYPE: PRT
200 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: Description of Artificial Sequence: Amino acid
203
          sequence of the human TCR beta chain after
204
          mutating the unpaired cysteine to alanine (Figure
205
          7C).
206 <400> SEQUENCE: 16
```

Input Set : N:\Crf3\RULE60\10014326.raw
Output Set: N:\CRF3\04092002\J014326.raw

Asp Ser Arg Tyr Ala Leu Ser Ser 207 208 1 210 <210> SEQ ID NO: 17 211 <211> LENGTH: 26 212 <212> TYPE: DNA 213 <213> ORGANISM: Artificial Sequence 214 <220> FEATURE: 215 <223> OTHER INFORMATION: Description of Artificial Sequence: Backward PCR primer for mutating the unpaired cysteine of human TCR beta chains to alanine (Figure 7D). 218 <400> SEQUENCE: 17 219 cggctgctca gagcgtatct ggagtc 26 221 <210> SEQ ID NO: 18 222 <211> LENGTH: 57 223 <212> TYPE: DNA 224 <213> ORGANISM: Artificial Sequence 225 < 220 > FEATURE: 226 <223> OTHER INFORMATION: Description of Artificial Sequence: 5' PCR primer for the human V alpha10.2 chain of the JM22. 227 Influenza matrix peptide-HLA-A0201 restricted TCR. 228 (Figure 9A). 229 230 <400> SEQUENCE: 18 gctctagaca tatgcaacta ctagaacaaa gtcctcagtt tctaagcatc caagagg 233 <210> SEQ ID NO: 19 234 <211> LENGTH: 15 235 <212> TYPE: PRT 236 <213> ORGANISM: Homo sapiens 237 <220> FEATURE: 238 <223> OTHER INFORMATION: New N-terminal amino acid sequence of truncated V 239 alpha10.2 chain of the human JM22 Influenza matrix peptide-HLA-A0201 restricted TCR. (Figure 9A). 241 <400> SEQUENCE: 19 242 Met Gln Leu Leu Glu Gln Ser Pro Gln Phe Leu Ser Ile Gln Glu 243 10 245 <210> SEQ ID NO: 20 246 <211> LENGTH: 39 247 <212> TYPE: DNA 248 <213> ORGANISM: Artificial Sequence 249 <220> FEATURE: 250 <223> OTHER INFORMATION: Description of Artificial Sequence: 5' PCR primer 251 for the human V beta17 chain of the JM22 Influenza 252 matrix peptide-HLA-A0201 restricted TCR. (Figure 253 9B) 254 <400> SEQUENCE: 20 39 gctctagaca tatggtggat ggtggaatca ctcagtccc 257 <210> SEO ID NO: 21 258 <211> LENGTH: 9 259 <212> TYPE: PRT 260 <213> ORGANISM: Artificial Sequence

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/014,326
DATE: 04/09/2002
TIME: 11:22:47

Input Set : N:\Crf3\RULE60\10014326.raw
Output Set: N:\CRF3\04092002\J014326.raw

L:11 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD L:13 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD L:713 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:999 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1027 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1146 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1174 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1231 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1264 M:259 W: Allowed number of lines exceeded, <223> Other Information: L:1356 M:259 W: Allowed number of lines exceeded, <223> Other Information: